

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P686280

Luminaire Tested: SQ4R-F-050D-92765-1-UNV-STD-W-4_4000K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686280
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-050D-92765-1-UNV-STD-W-4_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500K
500 LUMENS PER FOOT
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

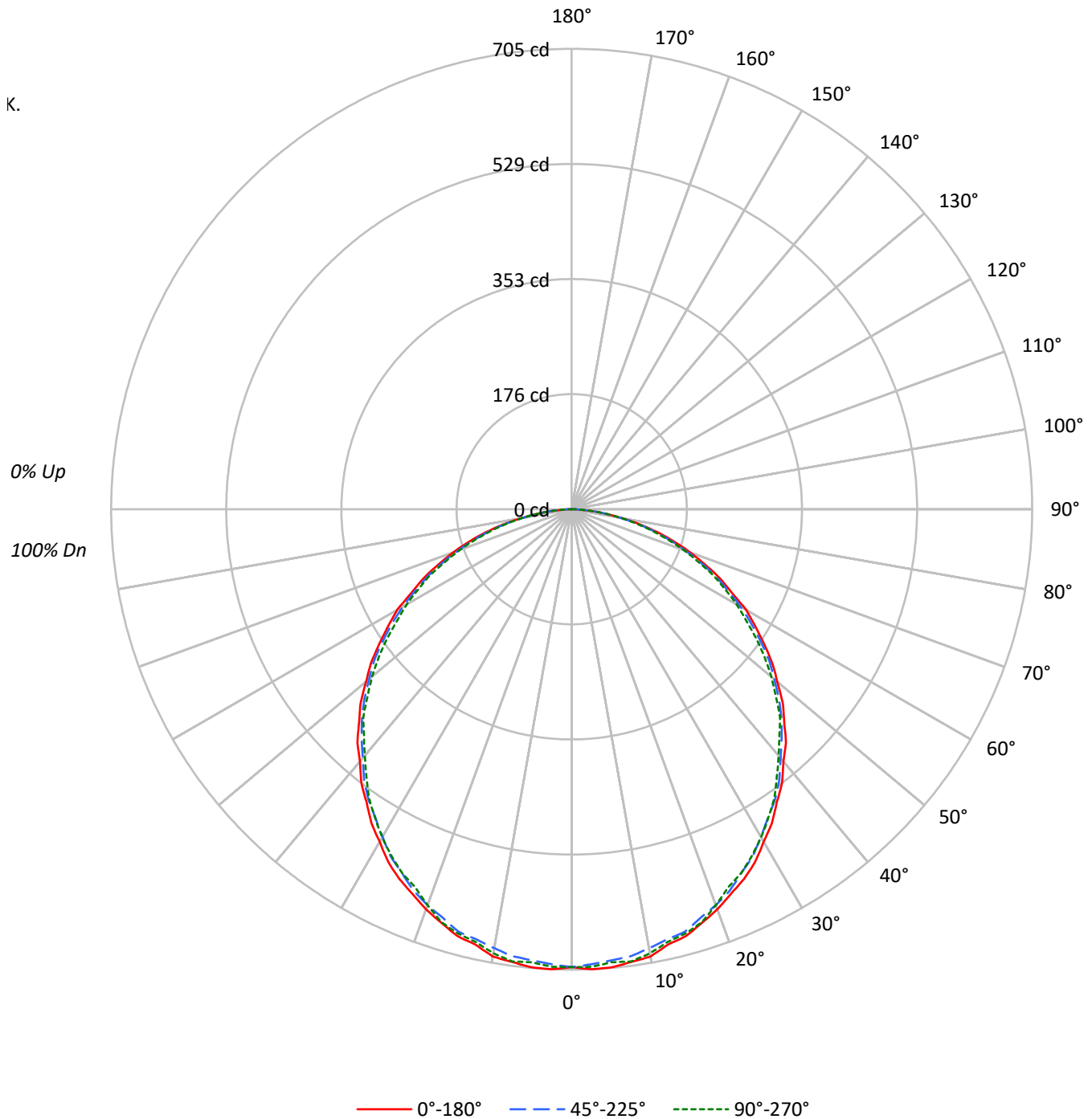
Lumens per Lamp: N/A
Luminaire Lumens: 1960.8 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75		82	77	73		79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63		72	67	62		70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46		58	51	46		56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41		52	45	40		51	45	40	38
7	65	51	43	36	63	51	42	36	49	41	36		48	41	36		46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32		44	37	32		42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29		40	34	29		39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6751	6751	6751
5°	6805	6700	6729
10°	6797	6672	6748
15°	6744	6675	6704
20°	6679	6608	6608
25°	6633	6528	6528
30°	6536	6438	6448
35°	6435	6377	6355
40°	6337	6250	6188
45°	6262	6181	6140
50°	6151	6063	5973
55°	6034	5933	5786
60°	5934	5746	5613
65°	5697	5540	5451
70°	5433	5210	5129
75°	5055	4873	4724
80°	4313	4202	4202
85°	3159	3259	3159

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 6275 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	3.4
10°-20°	189.4	9.7
20°-30°	284.7	14.5
30°-40°	339.8	17.3
40°-50°	350.6	17.9
50°-60°	315.8	16.1
60°-70°	240.2	12.3
70°-80°	137.9	7.0
80°-90°	35.9	1.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	540.5	27.6
0°-40°	880.3	44.9
0°-60°	1546.7	78.9
0°-90°	1960.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1960.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	704	701	693	701	696	67
15°	677	674	670	672	673	191
25°	624	619	614	616	614	287
35°	548	547	543	541	541	343
45°	460	461	454	450	451	355
55°	360	360	354	351	345	322
65°	250	247	243	238	239	247
75°	136	132	131	128	127	143
85°	29	30	30	30	29	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	701.2	701.2	701.2	701.2	701.2
2.5°	705.1	705.1	697.2	702.2	701.2
5°	704.1	701.2	693.3	701.2	696.3
7.5°	699.2	694.3	690.3	695.3	698.2
10°	695.3	694.3	682.5	688.4	690.3
12.5°	682.5	687.4	674.6	678.5	678.5
15°	676.6	673.6	669.7	671.6	672.6
17.5°	663.8	661.8	655.9	660.8	662.8
20°	651.9	649.0	645.0	646.0	645.0
22.5°	637.2	635.2	632.2	632.2	626.3
25°	624.4	619.4	614.5	616.5	614.5
27.5°	608.6	604.7	599.7	600.7	597.8
30°	587.9	588.9	579.1	579.1	580.0
32.5°	570.2	566.3	559.4	559.4	560.3
35°	547.5	546.6	542.6	540.7	540.7
37.5°	528.8	528.8	521.9	519.0	516.0
40°	504.2	505.2	497.3	496.3	492.4
42.5°	485.5	483.5	475.7	474.7	470.7
45°	459.9	460.9	454.0	450.1	451.0
47.5°	438.2	435.3	430.4	426.4	423.5
50°	410.7	409.7	404.8	401.8	398.8
52.5°	387.0	384.1	381.1	374.2	372.3
55°	359.5	360.4	353.5	350.6	344.7
57.5°	332.9	331.9	326.0	321.0	316.1
60°	308.2	305.3	298.4	293.5	291.5
62.5°	275.7	274.8	269.8	265.9	263.9
65°	250.1	247.2	243.2	238.3	239.3
67.5°	220.6	218.6	214.7	210.7	208.8
70°	193.0	190.1	185.1	183.2	182.2
72.5°	164.5	161.5	157.6	153.6	154.6
75°	135.9	132.0	131.0	128.0	127.0
77.5°	106.4	104.4	102.4	101.4	100.4
80°	77.8	78.8	75.8	74.8	75.8
82.5°	53.2	53.2	52.2	51.2	52.2
85°	28.6	29.5	29.5	29.5	28.6
87.5°	9.8	11.8	12.8	12.8	11.8
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	18.46	20.10	18.83	20.42	20.73	18.22	19.86	18.58	20.17	20.49
	3H	20.30	21.78	20.67	22.11	22.47	20.02	21.51	20.40	21.83	22.19
	4H	20.98	22.38	21.38	22.73	23.11	20.69	22.09	21.09	22.44	22.81
	6H	21.47	22.77	21.88	23.13	23.52	21.18	22.47	21.59	22.84	23.23
	8H	21.61	22.85	22.04	23.24	23.64	21.33	22.57	21.75	22.95	23.35
	12H	21.69	22.88	22.12	23.26	23.69	21.41	22.60	21.84	22.98	23.41
4H	2H	19.07	20.47	19.47	20.82	21.20	18.88	20.28	19.28	20.63	21.00
	3H	21.13	22.30	21.54	22.70	23.10	20.90	22.08	21.31	22.47	22.87
	4H	21.94	23.00	22.37	23.42	23.85	21.70	22.76	22.13	23.17	23.61
	6H	22.56	23.48	23.01	23.92	24.38	22.30	23.23	22.76	23.67	24.13
	8H	22.75	23.61	23.21	24.06	24.52	22.50	23.36	22.96	23.81	24.27
	12H	22.86	23.64	23.34	24.12	24.59	22.62	23.40	23.10	23.88	24.35
8H	4H	22.24	23.11	22.70	23.55	24.02	22.02	22.89	22.48	23.33	23.80
	6H	22.97	23.69	23.46	24.18	24.65	22.74	23.46	23.24	23.95	24.43
	8H	23.23	23.88	23.74	24.38	24.87	23.00	23.65	23.51	24.16	24.64
	12H	23.41	23.98	23.91	24.47	25.03	23.19	23.76	23.70	24.25	24.81
12H	4H	22.27	23.05	22.75	23.52	23.99	22.06	22.84	22.54	23.32	23.78
	6H	23.02	23.67	23.53	24.17	24.66	22.80	23.45	23.31	23.95	24.44
	8H	23.33	23.90	23.84	24.39	24.95	23.11	23.69	23.62	24.18	24.74